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ABSTRACT

This study reports the findings of a survey taken in May 1971 to identify and assess educational objectives in York Borough. The first section of the report discusses objective setting in relation to planned decisionmaking in schools and demonstrates why objectives are important in planning. The next sections of the report describe the design and findings of the survey. The remaining sections summarize the findings and discuss their implications for educational planning in York Borough. (Author)

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DEVELOPING AND ASSESSING OBJECTIVES FOR SCHOOL SYSTEM PLANNING

A Report for the Board of Education for the Borough of York

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For more than two years, York Borough has worked to implement a planned approach to educational decision-making. Its Management of Educational Resources System (MERS) represents an approach to decision-making which combines objective setting with budgeting and evaluation. A project of this kind immediately encounters many difficulties which can be solved only with persistence and ingenuity since few school systems have proceeded as far as York Borough towards planned decision-making and policy formation. One of the problems to be solved in implementing MERS is the identification of educational objectives.

This study reports the findings of a survey taken in May 1971 to identify and assess educational objectives in York Borough. The first section of the report discusses objective setting in relation to planned decision-making in schools and demonstrates why objectives are important in planning. The next sections of the report describe the design and findings of the survey. The remaining sections summarize the findings and discuss their implications for educational planning in York Borough. Readers who wish to look directly at the findings of the study should turn to page 12. Those interested in the summary and implications may turn to page 46.

Planned Decision-Making in School Systems

As long as they have existed, schools have never been free from controversy about the aims they should pursue and the methods they should use to attain these aims. In recent years, however, controversy over ends and means has reached new highs of intensity

as education has expanded to assume greater scope in the variety of programs offered and the numbers of students involved in them. Inevitably with this expansion of role, the costs of education have increased markedly, thus calling into question not only the purposes and programs of education but also the effectiveness of monies spent in support of them. In Ontario, evidence of the Great Debate About Education is found in the work of the Provincial Committee on Aims and Objectives of Education whose report, Living and Learning, has stimulated continuing discussion of basic issues in education. More recently, concern for equality of education led to the formation of large units of educational administration throughout the province and to new expansions of educational programs and further increases of costs.

In the face of these rapid changes in educational purposes, programs, and costs, some critics of education have advocated arbitrary restrictions upon educational expenditures and even a reduction or simplification of educational programs. These policies seem to lead only to further controversy and uncertainty as seen in the strong reactions against the provincial government's ceilings on educational expenditures. One way out of the dilemma posed by the seemingly insatiable social demand for more education and the growing resistance of society to pay for it may be found in educational planning. Education has always been planned in the sense the programs and the costs required to support them have been organized and coordinated. However, the concept of planning now advocated formalizes and makes explicit procedures which in previous planning systems were carried

out largely through intuition, subjective judgement, or expedient compromise.

Educational planning uses three basic processes to place decision-making on a rational basis and to increase the likelihood that these decisions use resources effectively. The three basic elements of educational planning require clear objectives, programs to achieve them, and evaluation of the programs as means for achieving the objectives. Planning is thus a cyclical process leading from objective setting as the cycle begins once more. In simplified form, the planning process may be depicted as in figure 1.

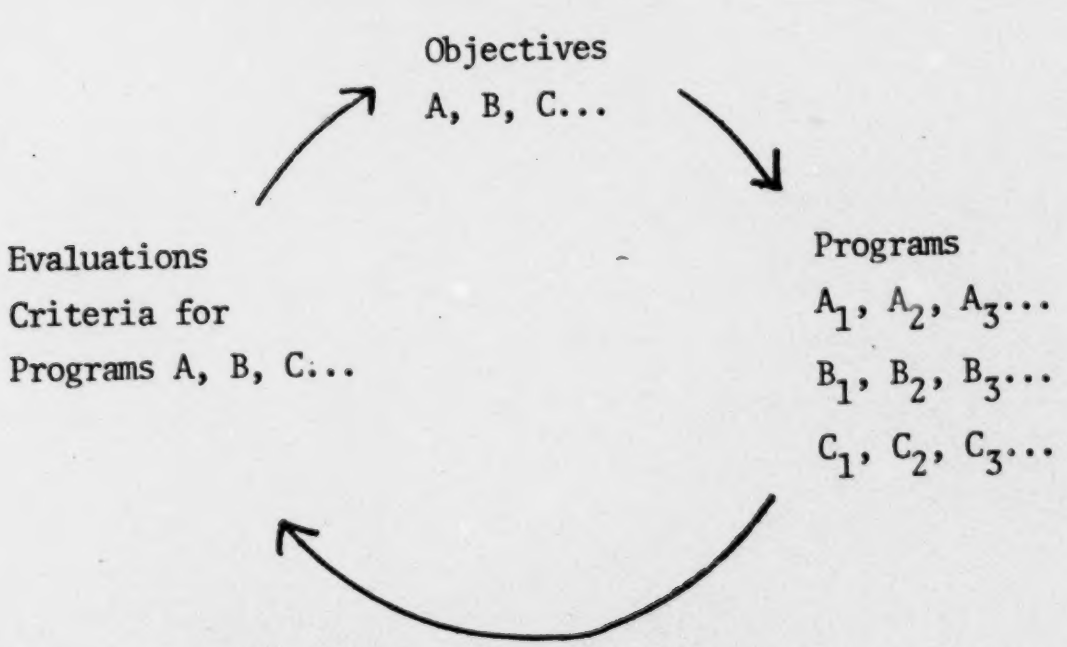

Figure 1. The Cycle of Educational Planning.

The process of educational planning begins by identifying broad aims which set objectives for the school system. In this phase of planning, an attempt must be made to identify the basic tasks schools should undertake and to define their basic reasons for existence. Are schools designed to transmit knowledge and, if so, what kinds of knowledge? Is the role of schools to prepare people for the

world of work? Should schools attempt to solve social and personal problems? Should schools transmit our cultural heritage and prepare people for the responsible citizenship? These and other aims are often advocated for schools. The point in setting objectives, however, is to identify those missions which a particular school system will take active responsibility for and which it will strive to realize through its programs. In addition to setting such objectives, planning requires priorities among objectives. Without such priorities, schools are apt to accept objectives even though monetary or other practical limitations make it impossible to achieve them all or to emphasize equally all those that are accepted. Setting objectives and priorities enables schools to use resources effectively in pursuit of educational aims and to communicate meaningfully to their publics what the aims are and how the resources expended contribute to them.

After a clarification of objectives and priorities, planning requires a search for programs to achieve each objective. A program is a set of people, facilities, materials and methods coordinated so as to contribute to an objective. For each objective, there exists many possible ways of defining a program depending on what resources and activities are assigned to achieve the objective.

The task of planning in this phase is therefore to select from among the many possible program alternatives that one best able to achieve the relevant objective with the resources available. In figure 1, these alternative programs are designated as A_1, A_2 etc. This illustration implies that for objective A there are several alternative programs and that these programs may vary in costs and

ultimate effectiveness. Similar alternatives among programs exist for each of the other objectives of the school system. The principal value in a planned approach to education is that it highlights the alternatives in decision-making and clarifies criteria in the objectives, costs, and effectiveness of programs for making such decisions.

Setting objectives and developing programs to meet them leads to evaluation of the programs against the objectives they are supposed to serve. Thus the planning cycle continues as evaluation of programs brings further consideration of educational objectives and possible modification of programs or objectives in the light of past decisions. As the cycle continues, new decisions are made according to the changed objectives or on the basis of new information about their cost and effectiveness.

Although the concept of planning in education is basically simple, anyone familiar with the operation of schools knows that many problems will arise in attempting to implement the concept in practice. Foremost among these problems are the difficulties of identifying educational objectives, getting agreement on them, defining the alternative programs, and obtaining meaningful and appropriate evaluations of the programs.

Design of the Study

This study reports one attempt to clarify educational objectives and to determine priorities among them. Recognizing that one of the persistent difficulties in discussing educational objectives is the lack of concrete statements which translate general aspirations

for education into actionable goals, this study selected sets of educational objectives developed in earlier studies and combined them with modifications into a single structure which could serve as a basis for discussion and analysis. Although no claim is made that this structure contains all possible and desirable objectives for education or that it reflects the objectives of any particular school system, it contains many commonly stated objectives and reflects broad purposes often advocated as desirable ends in education. In particular, it draws upon Living and Learning and upon another Canadian study by Downey[1] in identifying a broad framework of programs and purposes commonly advocated for or found in Canadian school systems. Within this broad frameowrk, the study modified and added to a set of 107 goals developed from an analysis of curriculum guides used in schools.[2] Based on this earlier work, the study identified four programs defining broad educational purposes and within them forty-nine specific objectives. In a questionnaire, respondents assessed each of the forty-nine objectives and the four programs as a whole. These assessments indicate the importance the respondents attach to the objectives and programs and suggest the priorities schools might appropriately give them.

Programs and Objectives

The scope of the educational objectives considered in the study is indicated in the four broad programs. Each of these programs is defined in terms of a comprehensive purpose indicating skills, attitudes

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[1] L. W. Downey, The Secondary Phase of Education (Toronto: Blaisdell, 1965).

[2] Center for the Study of Evaluation, Choosing Goals (Los Angeles: University of California at Los Angeles, 1970).

and understandings which students may develop through these programs.

These programs and their purposes are as follows:

1.0 Intellectual and Communication Skills

To develop the verbal and quantitative skills needed to acquire knowledge and analyse it critically; to acquire the habits of conceptual and creative thinking; to communicate ideas and feelings clearly and effectively.

2.0 Environmental Studies

To understand man's physical and social environment by acquiring science-based knowledge about the evolution of social and physical reality; to appreciate and use the processes of scientific discovery in analyzing significant problems in man's environment.

3.0 Individual Development

To help the individual live a productive, fulfilling life by building the basic skills, attitudes and knowledge which permit him to develop his potentials to their fullest capacity; to enable the individual to understand himself and care for his body; to assist the individual to make informed choices about his future and to provide him with the information and training necessary for making these decisions.

4.0 To develop the capacity for understanding human values and appreciate their expression in the arts, philosophy, religion and language; to make aesthetic and moral judgements; to create art and learn a second language; to apply aesthetic and ethical judgement to the conduct of daily life.

These programs were further elaborated in terms of sub-programs. These sub-programs were named but not further defined except in terms of the specific objectives which they contained. The complete program structure appeared as follows:

1.0 Intellectual and Communication Skills

1.1 Conceptual Skills
1.2 Verbal Skills
1.3 Quantitative Skills

2.0 Environmental Studies

- 2.1 The Physical Environment
- 2.2 The Social Environment

3.0 Individual Development

- 3.1 Personal and Social Adjustment
- 3.2 Physical Development
- 3.3 Productive Development

4.0 Cultural Development

- 4.1 Arts and Crafts
- 4.2 The Performing Arts
- 4.3 Second Languages
- 4.4 Morality and Ethics
- 4.5 Religious Knowledge and Belief

Appendix A of this report contains the definitions of each of the forty-nine objectives contained in the program structure. The numbering of these objectives indicates how they are related to the programs and sub-programs. For example, the first objective listed is:

> 1.1.1 To develop skills in perceiving relationships and thinking logically; to reason analytically and solve problems through systematic comparison, classification, inference and deduction.

This numbering indicates that this objective defines a conceptual skill within the program called "Intellectual and Communication Skills." Similarly, the objective numbered 3.2.4 identifies the fourth objective found in the physical development sub-programs of the third program called "Individual Development."

Procedures for analysis. Five groups in the York Borough Board of Education completed the questionnaire on objectives during the school year 1970-71. These groups were composed of members of the Education Council, coordinators and consultants, elementary teachers, secondary teachers, and trustees. Because of differences between

elementary and secondary education, it is likely that groups evaluating them would see the objectives as being of different importance depending on whether they applied to elementary or secondary schools. To avoid confounding judgements about the importance of objectives at the two levels, the study aimed to test a strategy for evaluating objectives with respect to elementary schools only. If the procedure appears useful, it might be repeated for secondary schools.

The numbers of persons in the groups completing the questionnaire for elementary schools are shown in Table I. These groups cannot be considered statistically representative of the York Borough school

TABLE I

NUMBERS OF PERSONS COMPLETING THE OBJECTIVES QUESTIONNAIRE FROM FIVE GROUPS IN THE YORK BOROUGH BOARD OF EDUCATION

Group	Number
Education Council (EC)	9
Coordinators and Consultants (Co)	11
Secondary Teachers (ST)	6
Elementary Teachers (ET)	16
Trustees (Tr)	6
Total	48

system as a whole, although almost all senior administrators, coordinators, consultants and a large proportion of school board members completed the questionnaire. The teachers represented in study were those attending the School Board Liaison Conference of May 1971. Even though their responses may not be statistically representative of the five groups, the findings of the study provide some insight into their views and may serve also to stimulate discussion about objectives in realistic and concrete terms. As well the study indicates some problems a school system must overcome in setting objectives.

The first step in analysis was to average the individual responses to the items as a measure of the importance placed upon the forty-nine objectives. Using averages as measures of group opinion has obvious limitations in that individuals in the groups were by no means agreed among themselves about the importance of the objectives. However, this procedure offers a convenient single measure of the group's opinion and permits a ranking of the objectives.

Because of the large number of objectives and because many were assessed to be approximately equal in importance, the objectives were further ordered into four large categories to express major differences in importance among the objectives. The first of these categories was designed to contain approximately 10 per cent of the objectives and the remaining categories approximately 30 per cent each. The names of these categories and the approximate number of objectives each should contain are given in Table II. The category of "priority" objectives contains a limited number of objectives which appear to have preeminent importance; the "high" category

TABLE II

CATEGORIES DESIGNED TO INDICATE THE GENERAL RANKING OF OBJECTIVES

Category of Ranked Objectives	Expected Number of Ranked Objectives in Each Category
1. Priority	4-5
2. High	14-15
3. Moderate	14-15
4. Low	14-15

contains objectives which fall above the midpoint of those ranked; the "moderate" category contains those around the midpoint and the "low" category contains the remaining objectives with the lowest rankings. These categories offer a more convenient and meaningful way of looking at the importance of the objectives than by considering the large and rather unwieldly array of forty-nine objectives.

Specifically, the procedure used to rank the objectives within a group was as follows: The objectives were placed in order from those rated highest in importance to those rated lowest. Arrayed in this fashion, the objectives were then further grouped into categories of priority, high, moderate, and low importance. The rank of objectives from the five groups were then combined to express a collective opinion for all groups. Thus the analysis

provided a ranking of the objectives for each group and for all groups together. The analysis also placed the ranked objectives into four broad categories of importance for the groups taken both separately and in combination. The results for the combined groups may be taken as a York Borough opinion, since this final ranking was influenced by the number of groups but not by the varying numbers of individuals within the groups.

By basing the overall rank upon the separate opinions of the groups, it is also possible to express the degree of consensus among groups. When the groups assigned similar ranks to a given objective, consensus among the groups is apparent on the importance of that objective. Similarly, when the groups assign very different ranks to an objective, the result indicates lack of consensus. Any measure of consensus derived in this way is a relative matter. The range of group consensus displayed about the objectives was divided arbitrarily in five roughly equal parts. Thus each objective was placed in one of five groups ranging from those on which there was strong consensus to those on which there was low consensus.

Following the ranking of objectives, the analysis determined the importance each group attached to the programs as a whole. These measures were obtained by averaging the scores on a five point scale from responses by the groups.

Findings of the Study

The findings of the analyses described above will be reported under four headings: (1) the ranking of the objectives; (2) consensus

among groups with respect to the overall rankings; (3) the relationship of the ranked objectives to programs, and (4) the assessment of the programs.

Ranking of the objectives. Tables III, IV, V and VI contain the ranking of the forty-nine objectives given by the five groups. Each table displays the objectives in one of the four broad categories devised to indicate objectives of priority, high, moderate, and low importance. Thus Table III contains four objectives ranked as priority over all groups. The table also contains information indicating the specific ranking each of the groups gave to these objectives and whether any of these groups placed these objectives in another category of rank. Consensus among groups on the overall ranking is also shown in the table. The following three tables contain similar information for those objectives placed in the high, moderate, and low categories. As presented in these four tables, the ranking of objectives by the groups is difficult to understand and use because of the complexity of the information arising from the number of objectives, groups, and ratings. This complexity can be reduced by considering only the overall rankings of the objectives and relating these to general program structure. By dealing only with the overall rankings, some richness in the data is lost by masking the differences in rankings among the groups. The information in these four tables does make it possible to return from findings presented later to discover how particular groups may disagree with the values assigned for the groups as a whole.

Before looking further at the results for the overall rankings, attention should be drawn to the relationship between the rankings

TABLE III

RANKS OF OBJECTIVES IN THE CATEGORY "PRIORITY IMPORTANCE"

Objective Number	Ranks Assigned by Groups[1,2]					Overall Rank	Consensus Rating
	E.C.	C.O.	E.T.	S.T.	Tr.		
1.1.1	9.5h	1	4	8h	2	3	1
1.2.7	1.0	2.5	1.5	2	14.5h	2	2
2.2.3	5	2.5	4	2	14.5h	4	2
3.1.4	2	7.5h	1.5	8h	2	1	1

[1]Where a group rating places an objective in another category, that category is indicated as follows: p=priority, h=high, m=moderate, L=low.

[2]The groups are the Education Council (E.C.), the Coordinators (C.O.), elementary teachers (E.T.), secondary teachers (S.T.), and Trustees (Tr.) of the York Borough Board of Education.

TABLE IV

RANKS OF OBJECTIVES IN THE CATEGORY "HIGH IMPORTANCE"

Objective Number	Ranks Assigned by Groups[1,2]					Overall Rank	Consensus Rating
	E.C.	C.O.	E.T.	S.T.	Tr.		
1.1.2	20.5	4.5p	7	12	2p	6	3
1.2.1	8	7.5	6	2p	7	5	1
1.2.2	24m	12	17	16.5	14.5	16	2
1.2.3	12	16.5	11.5	5p	14.5	9	2
1.2.5	5p	6	17	10	14.5	8	2
1.3.1	16	12	20	12	29.5m	15	3
1.3.2	20.5	22m	11.5	5p	20.5m	20	3
2.1.3	16	12	26.5m	24m	14.5	14	3
3.1.2	5p	12	4p	20.5	25m	10	4
3.1.3	9.5	22m	20	16.5	7	17	3
3.2.1	5p	22m	11.5	8	9	7	3
3.2.3	16	32m	11.5	16.5	44.5L	18	5
3.3.1	12	28m	11.5	14	5p	11	4
4.1.2	16	9	34m	34m	14.5	13	5
4.2.1	30.5m	12	30.5m	5p	14.5	12	5
4.4.3	20.5	15	20	12	20.5m	19	1

[1]Where a group rating places an objective in another category, that category is indicated as follows: p=priority, h=high, m=moderate, L=low.

[2]The groups are the Education Council (E.C.), the Coordinators (C.O.), elementary teachers (E.T.), secondary teachers (S.T.), and Trustees (Tr.) of the York Borough Board of Education.

TABLE V

RANKS OF OBJECTIVES IN THE CATEGORY "MODERATE IMPORTANCE"

Objective Number	Ranks Assigned by Groups[1,2]					Overall Rank	Consensus Rating
	E.C.	C.O.	E.T.	S.T.	Tr.		
1.1.3	37L	35L	34	20.5	32.5	36	3
1.2.4	35	40L	25	28	20.5	31	3
1.2.6	30.5	32	23	35.5	23	33	2
1.3.3	16h	16.5h	23	31.5	25	24	3
2.1.1	37L	4.5p	26.5	24	32.5	28	5
2.1.2	26	38.5L	34	33.5	37.5L	35	2
2.2.1	12h	35L	23	28	14.5h	25	4
2.2.2	26	22	34	35.5	27.5	29	2
2.2.5	30.5	35L	17h	16.5h	20.5	21	4
3.1.1	5p	22	11.5h	28	29.5	22	4
3.2.2	26	28	28.5	20.5h	40L	32	3
3.3.4	30.5	43.5L	11.5h	24	7h	26	5
4.1.1	34	22	28.5	20.5h	27.5	30	2
4.2.2	30.5	22	40L	28	42.5L	34	4
4.4.1	23	22	11.5h	33.5	4p	23	4
4.4.2	20.5h	22	30.5	28	25	27	1

[1]Where a group rating places an objective in another category, that category is indicated as follows: p=priority, h=high, m=moderate, L=low.

[2]The groups are the Education Council (E.C.), the Coordinators (C.O.), elementary teachers (E.T.), secondary teachers (S.T.), and Trustees (Tr.) of the York Borough Board of Education.

TABLE VI

RANKS OF OBJECTIVES IN THE CATEGORY "LOW IMPORTANCE"

Objective Number	Ranks Assigned by Groups[1,2]					Overall Rank	Consensus Rating
	E.C.	C.O.	E.T.	S.T.	Tr.		
1.3.4	37	41.5	40	37.5	42.5	39	1
1.3.5	43.5	37	40	40	35.5	40	1
2.2.4	41	32m	43.5	46	48.5	44	3
3.2.4	43.5	47.5	43.5	45	47	46	1
3.3.2	41	41.5	47	44	35.5	42	1
3.3.3	39	28m	38	43	32.5m	38	2
4.1.3	45	43.5	43.5	47.5	40	43	1
4.2.3	49	47.5	47	47	44.5	48	1
4.3.1	46	45	34m	40	37.5	41	2
4.3.2	41	38.5	47	49	46	47	2
4.3.3	30.5m	30m	37	42	40	37	2
4.5.1	48	46	43.5	31.5m	32.5m	45	3
4.5.2	47	49	49	37.5	48.5	49	2

[1]Where a group rating places an objective an another category, that category is indicated as follows: p=priority, h=high, m=moderate, L=low.

[2]The groups are the Education Council (.C.), the Coordinators (C.O.), elementary teachers (E.T.), secondary teachers (S.T.), and Trustees (Tr.) of the York Borough Board of Education.

and consensus with regard to them. As may be seen from these tables III to VI, there is considerably more consensus about the priority and low objectives than there is about the high and moderate objectives. One reason for many of the objectives appearing in the two middle groups is simply lack of agreement about them. That is, many of these objectives fall in the middle ranks merely because some groups rated them high while others placed them low.

By eleminating rankings from the separate groups and dealing only with the overall ranks, it becomes possible to consider the content of objectives. Tables VII, VIII, IX and X present the objectives in the four broad categories and show where groups disagreed with the placement of objectives in these categories. Within each table, one may see the final ranking of the objectives from 1 to 49 and the degree of consensus among groups about this ranking. As in the previous four tables, the objectives in Tables VII, VIII, IX and X are placed in categories from priority to low so as to best represent the rankings made by all groups. This grouping is achieved by accepting the average rank for each objective as the opinion of the five groups taken together. In cases where the groups agreed on the placement of an objective in a category, this procedure accurately reflects an opinion held across the groups. Where the groups disagree significantly in their rankings this procedure presents an opinion only by masking considerable differences among the groups. Thus these tables indicate the content of objectives when arranged to show overall rankings and the amount of consensus among groups about this order.

Table VII contains the four objectives most strongly endorsed

TABLE VII

THE CONTENT AND RANK OF OBJECTIVES IN THE CATEGORY "PRIORITY IMPORTANCE" FOR THE GROUPS AS A WHOLE

Overall Rank	Objective		Consensus Rating	Groups Disagreeing with Placement in this Category[1]
1	314	Needs and Interests	1	Co-, S.T.-
2	127	Reading Appreciation and Response	2	Tr-
3	111	Reasoning	1	E.C.-, S.T.-
4	223	Sociology	2	Tr-

[1]The groups are the Education Council (E.C.), Coordinators (Co), elementary teachers (E.T.), secondary teachers (S.T.), and Trustees (Tr) of the York Board of Education. A positive sign after a group name indicates that this group put this objective in a higher category in its own ranking and a negative sign that the group put the objective in a lower category.

TABLE VIII

THE CONTENT AND RANK OF OBJECTIVES IN THE CATEGORY "HIGH IMPORTANCE" FOR THE GROUPS AS A WHOLE

Overall Rank		Objective	Consensus Rating	Groups Disagreeing with Placement in this Category[1]
5	121	Language Construction	1	S.T.+
6	112	Creativity	3	Co+, Tr+
7	321	Health and Safety	3	E.C.+, Co-
8	125	Reading Mechanics	2	E.C.+
9	123	Oral-Aural	2	Tr-
10	312	Temperament: Social	4	E.C.+, E.T.+, Tr-
11	331	Educational & Vocational Guidance	4	Co-, Tr+
12	421	Music Appreciation and Response	5	E.C.-, E.T.-, S.T.+
13	412	Producing Arts and Crafts	5	E.T.-, S.T.-
14	213	Scientific Approach	3	E.T.-, S.T.-
15	131	Arithmetic Concepts	3	Tr-
16	122	Reference Skills	2	E.C.-
17	313	Attitudes	3	Co-
18	323	Sportsmanship	5	Co-, Tr-
19	443	Application of Moral Standards	1	Tr-
20	132	Arithmetic Operations	3	Co-, Tr+

[1]The groups are the Education Council (E.C.), Coordinators (Co), elementary teachers (E.T.), secondary teachers (S.T.), and Trustees (Tr) of the York Board of Education. A positive sign after a group name indicates that this group put this objective in a higher category in its own ranking and a negative sign that the group put the objective in a lower category.

TABLE IX

THE CONTENT AND RANK OF OBJECTIVES IN THE CATEGORY "MODERATE IMPORTANCE" FOR THE GROUPS AS A WHOLE

Overall Rank		Objective	Consensus Rating	Groups Disagreeing with Placement in this Category[1]
21	225	Citizenship	4	Co-, E.T.+, S.T.+
22	311	Temperament: Personal	4	E.C.+, E.T.+
23	441	Knowledge of Moral Standards	4	E.T.+, Tr+
24	133	Mathematical Applications	3	E.C.+, Co+
25	221	History and Civics	4	E.C.+, Co-, Tr+
26	334	Leisure Living	5	Co-, E.T.+, Tr+
27	442	Moral Development	1	E.C.+
28	211	Scientific Processes	5	E.C.-, Co+
29	222	Geography	2	
30	411	Valuing Arts and Crafts	2	S.T.+
31	124	Word Recognition	3	Co-
32	322	Physical Skills	3	S.T.+, Tr-
33	126	Reading Interpretation	2	
34	422	Music Performance	4	E.T.-, Tr-
35	212	Scientific Knowledge	2	Co-, Tr-
36	113	Memory	3	E.C.-, Co-

[1]The groups are the Education Council (E.C.), Coordinators (Co), elementary teachers (E.T.), secondary teachers (S.T.), and Trustees (Tr) of the York Board of Education. A positive sign after a group name indicates that this group put this objective in a higher category in its own ranking and a negative sign that the group put the objective in a lower category.

TABLE X

THE CONTENT AND RANK OF OBJECTIVES IN THE CATEGORY "LOW IMPORTANCE" FOR THE GROUPS AS A WHOLE

Overall Rank		Objective	Consensus Rating	Groups Disagreeing with Placement in this Category[1]
37	433	Second Language Assimilation	2	E.C.+, Co+
38	333	Home and Family	2	Co+, Tr+
39	134	Geometry	1	
40	135	Measurement	1	
41	431	Second Language Skills I	2	E.T.+
42	332	Understanding Media & Technology	1	
43	413	Understanding Arts and Crafts	1	
44	224	Research Skills	3	Co+
45	451	Religious Knowledge	3	S.T.+, Tr+
46	324	Physical Education	1	
47	432	Second Language Skills II	2	
48	423	Music Understanding	1	
49	452	Religious Belief	2	

[1]The groups are the Education Council (E.C.), Coordinators (Co), elementary teachers (E.T.), secondary teachers (S.T.) and Trustees (Tr) of the York Board of Education. A positive sign after a group name indicates that this group put this objective in a higher category in its own ranking and a negative sign that the group put the objective in a lower category.

by all groups. On these objectives, the amount of disagreement among the groups is relatively small. Even though some groups placed these objectives in lower categories, the relatively high consensus ratings indicates that the actual amount of disagreement was low. For example, the highest rated objective was "needs and interests". Although coordinators and secondary teachers, placed this objective in a lower category, reference to Table IV indicates that both of these groups placed this objective near the top of the next lower category. The four objectives in this category represent about eight per cent of the forty-nine objectives ranked. By limiting the number of objectives in this category to this small proportion, the designation "priority" for the category may be justified.

Table VIII contains sixteen objectives representing about thirty-three per cent of the objectives rated. Although this is a large category, all of the objectives in it fall above the mid-point of the set of objectives. This category represents objectives of high importance as averaged over the five groups, although a small group of other objectives have been identified as being of even greater importance. Table IX contains the next sixteen objectives and the next thirty-three per cent of the set of objectives. This category, containing objectives characterized as being of moderate importance, straddles the mid-point of the objectives when ranked in importance to the groups as a whole. Table X contains the remaining thirteen objectives or about twenty-six per cent of the total set. This category represents those objectives judged by the groups to be of lowest importance.

In terms of content, the objectives in each of the categories are highly diverse. This diversity may be seen in Table XI where the number of objectives in each category is related to the programs. The groups found some objectives in each program to be important while other objectives in the same program were of rated as being of less importance. Objectives in the Cultural Development program present the single exception to this generalization. Here the groups tended to place objectives in the lower ranks of importance. None of the objectives in this category was regarded as being of priority importance and relatively few were regarded as being of high importance. In view of the expansion of French language programs in many schools, it is worth noting that all three objectives dealing with the learning of a second language -- in this case French -- received rankings in the lowest category of importance. Objectives dealing with religious knowledge and belief received even lower rankings. Among objectives in the Intellectual and Communications Skills programs, the groups regarded verbal skills as more important than the quantitative skills. Among objectives in the Individual Development program, those dealing with productive development received the lowest rankings.

Consensus among groups. A measure of consensus among groups indicates whether the five groups were agreed when the forty-nine objectives were ranked in order of importance. Since there is no common standard for assessing consensus, the measure used in this study simply identifies five sets of objectives among which there was increasing group disagreement. Whether these differences among the groups constitute significant disagreement must be judged on practical grounds. It seems safe to say, however, that from those

TABLE XI

DISTRIBUTION OF OBJECTIVES BY PROGRAMS AND RANK CATEGORIES

Programs	Number of Objectives in Each Rank Category			
	Priority	High	Moderate	Low
Intellectual & Communication Skills				
Conceptual Skills	1	1	1	
Verbal Skills	1	4	2	
Quantitative Skills		2	1	2
Environmental Studies				
Physical Environment		1	2	
Social Environment	1		3	1
Individual Development				
Pers. & Social Adjustment	1	2	1	
Physical Development		2	1	1
Productive Development		1	1	2
Cultural Development				
Arts & Crafts		1	1	1
Performing Arts		1	1	1
Second Languages				3
Morality & Ethics		1	2	
Religious Knowledge & Belief				2

objectives on which there was most consensus to those on which there was least consensus represents a marked shift from agreement to disagreement.

Table XII contains the forty-nine objectives listed in order of increasing disagreement about them among the groups. For example, objective 4.2.3 -- Music Understanding -- was the objective on which there was the most agreement among groups, while objective 3.3.4 -- Leisure Living -- was the objective on which there was the least agreement. The five categories of consensus identify the objectives on which there was similar degrees of agreement or disagreement. Thus consensus category #1 includes eleven objectives on which there was considerable agreement, while consensus category #5 contains five objectives on which there was much disagreement. The table also identifies those groups which disagreed most with the ranked importance of each objective. Again it may be seen from this table that it is those objectives ranked as being of high or moderate importance on which there is most frequent disagreement.

If we look at the source of the disagreements by groups, we find that each group contributes approximately equally to the lack of consensus although more disagreements come from the coordinators and trustees than the other groups. The disagreement of these two groups appears more marked if we look only at the three most extreme categories of disagreement. In these categories, the trustees and coordinators disagree with the overall ranking of the objectives more frequently than the other three groups combined. This result suggests that the ranking of the objectives reflects

TABLE XII

OBJECTIVES RANKED ACCORDING TO INCREASING DISAGREEMENT AMONG GROUPS

Rank	Number	Name	Cat. of Consensus	Rank Category	Groups Disagreeing Most with Average Rank				
1	4.2.3	Music Understanding	1	L					
2	3.2.4	Physical Education	1	L					
3	1.2.1	Language Construction	1	H				ST	
4	1.3.4	Geometry	1	L					
5	4.1.3	Understanding Arts & Crafts	1	L					
6	1.3.5	Measurement	1	L					
7	3.1.4	Needs & Interest	1	P		Co		ST	
8	1.1.1	Reasoning	1	P	EC			ST	
9	4.4.3	Applic. of Moral Standards	1	H					Tr
10	4.4.2	Moral Development	1	M	EC				
11	3.3.2	Understanding Media & Technology	1	L					
12	1.2.3	Oral - Aural	2	H				ST	
13	4.3.2	Second Language Skills II	2	L					
14	1.2.2	Reference Skills	2	H	EC				
15	2.1.2	Scientific Knowledge	2	M		Co			Tr
16	4.5.2	Religious Belief	2	L					
17	4.3.1	Second Language Skills I	2	L			ET		
18	2.2.3	Sociology	2	P					Tr
19	1.2.5	Reading Mechanics	2	H	EC				
20	4.1.1	Valuing Arts & Crafts	2	M				ST	
21	4.3.3	Second Language Assimilation	2	L	EC	Co			
22	1.2.6	Reading Interpretation	2	M					
23	2.2.2	Geography	2	M					
24	1.2.7	Reading Apprec. & Response	2	P					Tr
25	3.3.3	Home & Family	2	L		Co			Tr
26	2.1.3	Scientific Approach	3	H			ET	ST	
27	2.2.4	Research Skills	3	L		Co			
28	1.3.3	Mathematical Applications	3	M	EC	Co			
29	1.1.3	Memory	3	M	EC	Co		ST	
30	3.2.1	Health and Safety	3	H	EC	Co			
31	3.1.3	Attitudes	3	H		Co			
32	3.2.2	Physical Skills	3	M				ST	Tr
33	1.3.1	Arithmetic Concepts	3	H					Tr
34	1.1.2	Creativity	3	H		Co			Tr
35	1.3.2	Arithmetic Operations	3	H		Co		ST	Tr
36	4.5.1	Religious Knowledge	3	L				ST	Tr
37	1.2.4	Word Recognition	3	M		Co			
38	2.2.5	Citizenship	4	M		Co	ET	ST	
39	3.3.1	Educ. & Voc. Guidance	4	H		Co			Tr
40	4.2.2	Music Performance	4	M			ET		Tr
41	3.1.2	Temperament: Social	4	H	EC		ET		Tr
42	2.2.1	History and Civics	4	M	EC	Co			Tr

Continued....2

TABLE XII--Continued

Rank	Number	Name	Cat. of Consensus	Rank Category	Groups Disagreeing Most with Average Rank				
43	3.1.1	Temperament: Personal	4	M	EC		ET		
44	4.4.1	Knowledge of Moral Standards	4	M			ET		Tr
45	4.2.1	Music Appreciation & Interest	5	H	EC		ET	ST	
46	4.1.2	Producing Arts & Crafts	5	H			ET	ST	
47	2.1.1	Scientific Processes	5	M	EC	Co			
48	3.2.3	Sportsmanship	5	H		Co			Tr
49	3.3.4	Leisure Living	5	M		Co	ET		
Total number of disagreements by groups					13	18	10	13	17
Number of disagreements in categories 3 to 5					8	14	9	8	12

most accuratley the opinions of teachers and the administrative council with the trustees and coordinators being "odd men out" most frequently when the objectives are ranked to represent the overall opinion about their importance.

It would be an error to regard the ordering of the objectives as indicating a final set of priorities among them. The lack of consensus on a number of objectives indicates unresolved disagreements which must be worked through by analysis and discussion. The information in Table XII indicates which objectives are in disagreement and which groups are disagreed about them. Meetings among representatives of these groups might resolve some of these conflicts or at least reduce the number of them. This suggestion does raise another problem however: Who should be involved in identifying objectives and how should conflicts among them be resolved? Although this study cannot answer these questions, it does provide some indication of the substantive issues which must be resolved in objective setting.

The relationships of objectives to programs. Although the ranking of objectives provides information of interest in itself, the findings of the survey appear more pointed and practical when the ranked objectives are viewed in relation to the programs. Within this relationship, we may ask which objectives in the programs are of greater or lesser importance. Tables XIII, XIV, XV, and XVI identify the programs and display the objectives ranked in the four broad categories of importance. While the information in these tables has already been presented in findings reported earlier, these tables emphasize the content of the objectives in the programs and suggest which objectives within them

TABLE XIII

RELATIONSHIP OF FOUR OBJECTIVES GIVEN PRIORITY RATING TO PROGRAM STRUCTURE

Program	Sub-program	Objective	Overall Rank	Consensus Rating
1.0 Intellectual and Communication Skills	1.1 Conceptual Skills	1.1.1 Reasoning	3	1
	1.2 Verbal Skills	1.2.7 Reading Appreciation and Response	2	2
2.0 Environmental Studies	2.2 The Social Environment	2.2.3 Sociology	4	2
3.0 Individual Development	3.1 Personal and Social Adjustment	3.1.4 Needs and Interests	1	1

TABLE XIV

RELATIONSHIP OF SIXTEEN OBJECTIVES GIVEN HIGH RATING TO PROGRAM STRUCTURE

Program	Sub-program	Objective	Overall Rank	Consensus Rating
1.0 Intellectual and Communication Skills	1.1 Conceptual Skills	1.1.2 Creativity	6	3
	1.2 Verbal Skills	1.2.1 Language Construction	5	1
		1.2.2 Reference Skills	16	2
		1.2.3 Oral-Aural	9	2
		1.2.5 Reading Mechanics	8	2
	1.3 Quantitative Skills	1.3.1 Arithmetic Concepts	15	3
		1.3.2 Arithmetic Operations	20	3
2.0 Environmental Studies	2.1 The Physical Environment	2.1.3 Scientific Approach	14	3
3.0 Individual Development	3.1 Personal and Social Adjustment	3.1.2 Temperament: Social	10	4
		3.1.3 Attitudes	17	3
	3.2 Physical Development	3.2.1 Health and Safety	7	3
		3.2.3 Sportsmanship	18	5
	3.3 Productive Development	3.3.1 Educational and Vocational Guidance	11	4
4.0 Cultural Development	4.1 Arts and Crafts	4.1.2 Producing Arts & Crafts	13	5
	4.2 The Performing Arts	4.2.1 Music Appreciation & Interest	12	5
	4.4 Morality and Ethics	4.4.3 Application of Moral Standards	19	1

TABLE XV

RELATIONSHIP OF SIXTEEN OBJECTIVES GIVEN MODERATE RATING TO PROGRAM STRUCTURE

Program	Sub-program	Objective	Overall Rank	Consensus Rating
1.0 Intellectual and Communication Skills	1.1 Conceptual Skills	1.1.3 Memory	36	3
	1.2 Verbal Skills	1.2.4 Word Recognition	31	3
		1.2.6 Reading Interpretation	33	2
	1.3 Quantitative Skills	1.3.3 Mathematical Applications	24	3
2.0 Environmental Studies	2.1 The Physical Environment	2.1.1 Scientific Processes	28	5
		2.1.2 Scientific Knowledge	35	2
	2.2 The Social Environment	2.2.1 History & Civics	25	4
		2.2.2 Geography	29	2
		2.2.5 Citizenship	21	4
3.0 Individual Development	3.1 Personal and Social Adjustment	3.1.1 Temperament: Personal	22	4
	3.2 Physical Development	3.2.2 Physical Skills	32	3
	3.3 Productive Development	3.3.4 Leisure Living	26	5
4.0 Cultural Development	4.1 Arts and Crafts	4.1.1 Valuing Arts & Crafts	30	2
	4.2 The Performing Arts	4.2.2 Music Performance	34	4
	4.4 Morality and Ethics	4.4.1 Knowledge of Moral Standards	23	4
		4.4.2 Moral Development	27	1

TABLE XVI

RELATIONSHIP OF SIXTEEN OBJECTIVES GIVEN LOW RATING TO PROGRAM STRUCTURE

Program	Sub-program	Objective	Overall Rank	Consensus Rating
1.0 Intellectual and Communication Skills	1.3 Quantitative Skills	1.3.4 Geometry	39	1
		1.3.5 Measurement	40	1
2.0 Environmental Studies	2.2 The Social Environment	2.2.4 Research Skills	44	3
3.0 Individual Development	3.2 Physical Development	3.2.4 Physical Education	46	1
	3.3 Productive Development	3.3.2 Understanding Media and Technology	42	1
		3.3.3 Home and Family	38	2
4.0 Cultural Development	4.1 Arts and Crafts	4.1.3 Understanding Arts and Crafts	43	1
	4.2 The Performing Arts	4.2.3 Music Understanding	48	1
	4.3 Second Languages	4.3.1 Second Language Skills I	41	2
		4.3.2 Second Language Skills II	47	2
		4.3.3 Foreign Language Assimilation	37	2
	4.5 Religious Knowledge and Belief	4.5.1 Religious Knowledge	45	3
		4.5.2 Religious Belief	49	2

should receive greater or lesser emphasis. Looking at each of the programs in turn, we may identify the objectives according to four levels of importance -- 1. priority; 2. high; 3. moderate; and 4. low. Setting aside for the moment whether the groups were in agreement on this ordering, the priority of objectives within the programs may be easily identified from Tables XIII to XVI. In the following discussion, the objectives within programs are ordered from one to four to identify the overall priority which may be assigned to them on the basis of this analysis.

The content and order of objectives within the Intellectual and Communication Skills Program is as follows:

Conceptual Skills

Category of Importance	Objective
1	Reasoning
2	Creativity
3	Memory
4	--

Verbal Skills

1	Reading Appreciation & Response
2	Language Construction
2	Reference Skills
2	Oral - Aural
2	Reading Mechanics
3	Word Recognition
3	Reading Interpretation
4	--

Quantitative Skills

1	--
2	Arithmetic Concepts
2	Arithmetic Operations
3	Mathematical Applications
4	Geometry
4	Measurement

The ordering of objectives within this program places the emphasis upon developing holistic responses in intellectual activity through general skills such as reasoning, creativity, arithmetic concepts and reading appreciation. Specific skills such as memory, word recognition, and reading interpretation are placed in categories of lesser importance. This ordering raises the question as to whether the general intellectual skills may be developed without equal emphasis upon specific skills. While this problem may be more apparent then real, it does indicate that appropriate programs for intellectual development should focus upon the development of general skills. This conclusion suggests criteria for developing and selecting specific programs in this area.

The priorities for objectives in the Environmental Studies Program are as follows:

Environmental Studies

The Physical Environment

Category of Importance	Objective
1	--
2	Scientific Approach
3	Scientific Processes
3	Scientific Knowledge
4	--

The Social Environment

1	Sociology
2	--
3	History & Civics
3	Geography
3	Citizenship
4	Research Skills

In this program we find a similar approach to the ordering of objectives as appeared in the first program. The results place

greatest emphasis on highly developed behaviors with respect to the understanding of human relationships and the use of scientific approaches to physical reality. Specific understandings about the environment and processes for acquiring these understandings have ranks of lesser importance.

The ordering of objectives within the third program, Individual Development, appeared from the analysis as follows:

Individual Development

Category of Importance	Objective
1	Needs and Interests
2	Temperament: Social
2	Attitudes
3	Temperament: Personal
4	--

Physical Development

1	--
2	Health & Safety
2	Sportsmanship
3	Physical Skills
4	Physical Education

Productive Development

1	--
2	Educational & Vocational Guidance
3	Leisure Living
4	Understanding Media & Technology
4	Home & Family

The predominating objectives in this program indicate a concern for varied aspects of individual development. They indicate a desire to emphasize the development of active interests, satisfying social relationships, attitudes favourable to education, and sound health habits. Another major concern is to provide guidance on educational and vocational problems. Objectives given lesser emphasis include

the development of physical, home-making, and vocational skills. The objective of developing the individual's personal temperament also ranked comparatively low. In general, these rankings suggest a stress upon objectives directed towards the social development of the individual and upon the development of selected personal skills where these may be needed by the school to offer effective educational programs. Those objectives dealing with vocational development and those having to do with personal and physical development that are non-essential for educational programs received lower priorities.

The priorities for objectives in the Cultural Development Program are as follows:

Cultural Development

Arts & Crafts

Category of Importance	Objective
1	--
2	Producing Arts & Crafts
3	Valuing Arts & Crafts
4	Understanding Arts & Crafts

The Performing Arts

1	--
2	Music Appreciation and Interest
3	Music Performance
4	Music Understanding

Second Languages

1	--
2	--
3	--
4	Second Language Skills I
4	Second Language Skills II
4	Foreign Language Assimilation

Morality & Ethics

Category of Importance	Objective
1	--
2	Application of Moral Standards
3	Knowledge of Moral Standards
3	Moral Development
4	--

Religious Knowledge and Belief

1	--
2	--
3	--
4	Religious Knowledge
4	Religious Belief

The ranking of objectives in this program reflects the realtively low assessment of the program as a whole. This overall assessment indicates a lower concern for cultural development than for matters included in any of the other three programs. None of the objectives in this program fall in the category of primary importance and few in the secondary category. Most of the cultural objectives fall, in fact, in the third and fourth categories of importance. The three objectives ranked highest in this program have to do with artistic expression in arts and crafts, appreciation of music, and moral behavior. Objectives dealing with artistic creation and understanding rank low as do those concerning moral development and understanding. Other objectives in this program which received consistently low rankings concerned the learning of second languages and doctrinal religion. The clearest problem raised by these rankings arises in the sub-program dealing with morality and ethics. Since moral behavior is ranked above understanding and knowledge of moral issues, the school must rely upon other socializing forces to create the moral development in students which the school will expect from them. The low rankings given languages and religious instruction indicate a consistent view that the school cannot or ought not to be involved extensively in these aspects of education.

These findings on the rank of objectives within programs were

presented without considering the consensus among groups about the importance of the various objectives. Findings reported earlier indicated that agreement among the groups on the rank of objectives varied considerably depending on the objective considered. In particular, it was found that those objectives on which there was least agreement tended to turn up in the middle categories of priority simply because of this lack of agreement. Thus some of the apparent incompatibilities among objectives may be an artifact of this lack of agreement. The findings on the rank of objectives taken together with measures of consensus on the rankings may provide a useful starting point for discussions among the groups aimed at reducing the disagreements and removing anomalies in the priorities.

The foregoing findings on priorities among objectives emerged by considering only four broad categories of priority among the objectives. This approach offers the most practical way of ranking the objectives meaningfully within a rather complex program structure. It may be informative however to examine the ranks assigned to all objectives in relation to the programs. Figure 2 presents this relationship graphically for each of the forty-nine objectives. From this figure, several findings already reported may appear with greater clarity. First, we can see that no program contains objectives ranked uniformly high or low. Respondents to the questionnaire were clearly able to distinguish certain objectives within each program that were of greater importance than others. The figure also illustrates the tendency of respondents to prefer those objectives dealing with general competencies and skills over those which concern specific learnings and abilities. Finally the figure supports the finding

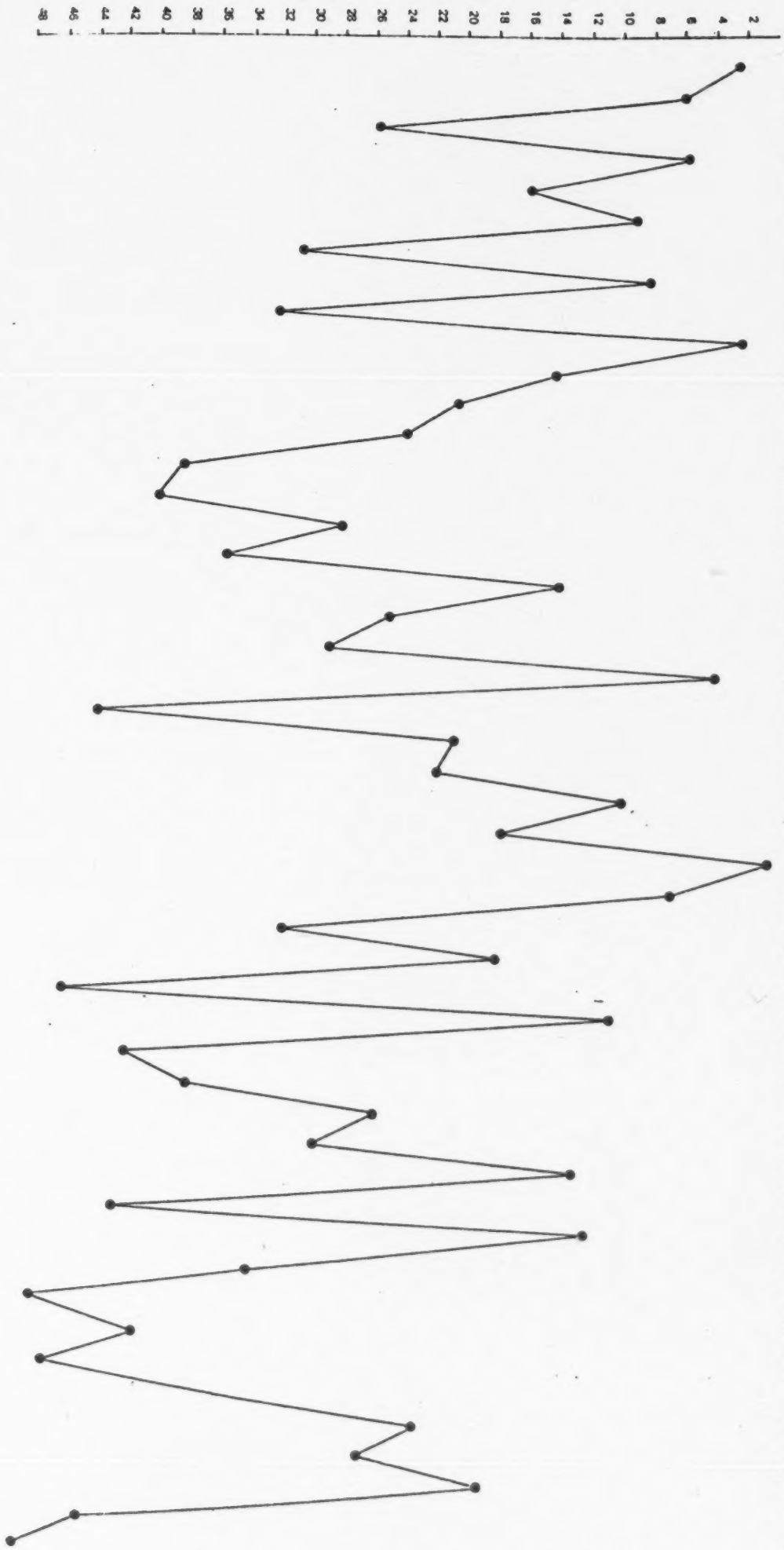

Fig. 2. Ranks of objectives in programs

that most objectives in the Cultural Development Program rank lower generally than those in the other three programs.

We may also examine the programs and objectives in Table 2 and ask where the most serious disagreement among the groups occurred. By taking the two categories of consensus which indicate the least amount of agreement among groups, we find that the objectives on which the groups disagreed most were distributed among the programs as follows:

Programs	Number of Conflicted Objectives
Intellectual and Communication Skills	0
Environmental Studies	3
Individual Development	5
Cultural Development	4

Significantly, none of the conflicted objectives is found in the Intellectual and Communication Skills Program. On the other hand, each of the other three programs contain conflicted objectives in approximately equal numbers. This finding suggests that it easier to get agreement on objectives dealing with the basic intellectual aims of education than on objectives related to other functions of the school.

Assessment of the programs. The bulk of findings in this report deal with the ranking of objectives and with the consensus among groups about these rankings. Other questions of obvious importance arise when we ask whether the programs themselves are valid and try to determine what emphasis should be placed upon them. Unfortunately, this survey presents no clear evidence about the validity of the

programs themselves. Such a judgement is not easily made, since evidence for it must come from a study of the proper role of education in society and from a clarification of the social and individual needs which schools must serve. Some justification of the programs used in this study was given earlier in the report by way of argument that the programs reflect major aims often advocated for education.

The survey does however present evidence about the values the five groups in York Borough place upon this particular set of programs. One way of measuring these values is to examine the rank of objectives in each of the programs. Assuming that every objective is appropriate to the program to which it is attached, we may then look to see whether the objectives in some programs receive generally higher rankings than objectives in other programs. Table XVII presents the results of such an analysis when the median ranks of objectives are calculated for each program. By ordering these medians, we obtain a measure of the importance of the programs themselves as seen in the values attached to the objectives within them. Since the medians reported in Table XVII were derived from the rank of objectives, the lower scores indicate greater importance for the program as a whole. When the results across the five groups are compared, it becomes clear that there are several differences among the groups. Despite these differences, a pattern of priorities among the programs does emerge which becomes clearer if we look at another analysis based on data which bears directly on the evaluation of the programs.

Each respondent in the survey was asked to describe the emphasis

TABLE XVII

IMPORTANCE OF PROGRAMS AS MEASURED BY MEDIAN RANK ASSIGNED TO OBJECTIVES WITHIN PROGRAMS

	Program	Groups[1]					
		EC	Co	ET	ST	Tr	Median
1.	Intellectual and Communication Skills	20.5(2)	16.5(1)	17 (2)	14.5(1)	20.5(1)	17 (1)
2.	Environmental Studies	26 (3)	27.5(3)	26.5(3)	26.5(3)	24 (2)	26.5(3)
3.	Individual Development	14 (1)	28 (4)	11.5(1)	20.5(2)	27.3(3)	20.5(2)
4.	Cultural Development	32.3(4)	26 (2)	35.5(4)	33.8(4)	35 (4)	33.8(4)
	Range of Medians	18.3	11.5	24.0	12.3	14.5	16.8

[1]The bracketed numbers order the median values within each group and indicate the importance of the programs for each group.

now placed on these programs in the school of York Borough and to state as well the emphasis he felt ought to be placed on them. These evaluations were measured on a five point scale with a score of 1 indicating "little emphasis" and a score of 5 indicating "heavy emphasis". Table XVIII shows the results when these scores are averaged in the five groups. Although some differences still remain among the groups, the pattern of evaluations is much clearer than from the analysis reported in Table XVII. Most of the disagreements in evaluating the importance of the groups arise in describing the emphasis now placed on these programs. Strong agreement emerges among the groups in expressing the emphasis they desire to see placed on the programs. Looking at present practice as described by the groups, we may place the programs in the following order indicating decreasing emphasis:

1. Intellectual and Communication Skills
2. Environmental Studies
3. Individual Development
4. Cultural Development.

In fact, the Environmental Studies Program and the Individual Development Program appear to have about equal emphasis but both are given more emphasis than the Cultural Development Program and less than the Intellectual and Communications Skills Program. Desired practice expressed by the groups indicates a different ordering for the programs. In this ordering, greater emphasis would be placed on the Individual Development Program resulting in the following set of priorities among programs:

1. Intellectual and Communication Skills
2. Individual Development
3. Environmental Studies
4. Cultural Development.

By comparing present and desired practice, we obtain an indication of the amount of change in emphasis desired for these programs. The

TABLE XVIII

DIFFERENCES BETWEEN PRESENT AND DESIRED EMPHASIS ON PROGRAMS AS MEASURED ON A FIVE POINT SCALE: MEAN VALUES

	Emphasis[1]		
	Now	Desired	Difference
Program 1: Intellectual and Communication Skills			
EC	4.0(1)	4.9(1)	+ .9(2)
Co	4.4(1)	4.4(1)	.0(3.5)
ET	4.1(1)	4.9(1)	+ .8(2.5)
ST	4.0(1)	4.7(1)	+ .7(2.5)
Tr	4.2(1)	5.0(1)	+ .8(3)
Median	4.1(1)	4.9(1)	+ .8(2)
Program 2: Environmental Studies			
EC	3.3(3)	3.7(3)	+ .4(3)
Co	3.0(2)	3.8(3)	+ .8(2)
ET	3.1(3)	3.7(3)	+ .6(4)
ST	2.8(3)	3.0(3.5)	+ .2(4)
Tr	3.7(2)	3.8(3)	+ .1(4)
Median	3.1(2)	3.7(3)	+ .4(4)
Program 3: Individual Development			
EC	3.4(2)	4.7(2)	+1.3(1)
Co	2.6(3)	3.9(2)	+1.3(1)
ET	3.3(2)	4.5(2)	+1.2(1)
ST	3.2(2)	4.0(2)	+ .8(1)
Tr	2.8(3)	4.7(2)	+1.9(1)
Median	3.0(3)	4.4(2)	+1.3(1)
Program 4: Cultural Development			
EC	3.1(4)	3.3(4)	+ .2(4)
Co	2.5(4)	2.5(4)	.0(3.5)
ET	2.6(4)	3.4(4)	+ .8(2.5)
ST	2.3(4)	3.0(3.5)	+ .7(2.5)
Tr	2.5(4)	3.7(4)	+1.2(2)
Median	2.5(4)	3.3(4)	+ .7(3)

[1]The bracketed numbers order the mean values within each group and indicate the emphasis each group places on the programs.

differences between present and desired practice provide a measure of where the groups feel increased emphasis should be put. The following order indicates which programs require greater emphasis:

1. Individual Development
2. Intellectual and Communication Skills
3. Cultural Development
4. Environmental Studies.

This order indicates a strong desire among the groups to see a greater emphasis upon Individual Development. Similarly the groups appear to feel that Environmental Studies warrants the least change in emphasis. There is some disagreement about changes in emphasis for the other two programs, but there is more support for an increased emphasis upon Intellectual and Communication Skills than for increased emphasis upon Cultural Development.

Summary and Discussion of Findings

Although the survey falls short as a complete study of views about educational objectives in York Borough, a number of findings emerge from this analysis to help in developing objectives for school systems. Limitations in the methodology and in the representativeness of the basic data may weaken the findings as generalizations but not their effectiveness as starting-points for the examination of urgent issues in the setting of educational objectives. The following findings identify some of the issues which should be considered in such an examination.

1. While differences of opinion among individuals are expected in assessing the importance of educational objectives, this study indicates that additional differences also exist among groups. Depending on the objective considered, differences appear not only between trustees

and the professional groups but also among these professional groups themselves. The study does not answer the question whether the differences among individuals is greater than that among groups, but it does suggest that opinions on educational objectives depend in part upon the group one belongs to and upon the particular interests or concerns that group may have for education.

2. Despite differences of opinion among groups on certain objectives, areas of agreement do exist among them on certain issues. These areas of agreement are found usually in identifying those objectives considered to be of greatest or least importance. Between these extremes, disagreements arise in trying to identify those objectives thought to be of moderate importance. In this situation, many objectives may be placed in a group of middling importance only by arbitrarily averaging the views of those groups who would attach greater importance to them and those who would assign less. These disagreements suggest the need to consider such objectives further through joint analysis and discussion of them by the disagreeing groups. Discussions of their disagreements may enable the groups to reduce the number of objectives on which there is conflict by focusing on the reasons for their disagreement and exploring whether alternative objectives would satisfy the divergent points of view.

3. More agreement emerged among groups in their assessments of the broad programs than appeared from their assessment of specific objectives within these programs. It is perhaps readily understandable but nevertheless significant that agreement is more easily reached on general aims and broad programs than upon specific objectives and activities within them.

4. At the present time, elementary schools in York Borough appear to place greatest emphasis upon intellectual and communication skills

and least upon cultural development. The emphasis on programs dealing with environmental studies and individual development falls between these two extremes.

5. In terms of desired emphasis upon these programs, the groups are agreed that intellectual and communications skills should continue as the program of greatest importance and cultural development as the program of least importance. It is clear, moreover, that most objectives within a cultural development program are rated much lower than those falling within the other three programs. The evaluations of the programs indicate strong support for increasing the emphasis upon individual development. While there is little support to increase the emphasis upon environmental studies, some groups would endorse greater emphasis upon cultural development.

6. There was a marked tendency among groups to endorse those objectives dealing with broader capabilities and to downgrade specific skills. In intellectual and communication skills and in environmental studies, this tendency acts to emphasize understanding over specific knowledge and processes for acquiring it. In cultural development, appreciation and interests in the arts are usually ranked above performance. In individual development, the priorities appear to give preference to the development of social attitudes needed by students to perform effectively in educational programs.

7. The most highly rated objectives were those which foster the desire for learning, pleasure in reading, the ability to reason, and understanding of people. Among the lowest rated objectives were those which support instruction in doctrinal religion, music form and style, French, and the strategies and concepts of sports.

8. The overall ranking of objectives is based on opinions in all five groups but this ranking best represents the views of the Education Council and teachers. Although all groups disagreed with the overall ranking on some issues, trustees and coordinators disagreed more frequently than the other three groups. The strongest agreement among groups emerged with respect to objectives in the Intellectual and Communications Skills program indicating that a general agreement among groups holds such objectives to be of pre-eminent importance in elementary education. When the question arises as to what other kinds of objectives are also important for elementary schools, disagreements emerge among the groups.

Implications of the Findings

Although the findings of the study may be controversial in themselves and although the findings are open to various interpretations according to one's vantage point, it may be useful to point out some of their implications for action. These considerations provide a framework within which the York Board can pursue further activities in objective setting, program development, and evaluation. The following implications are offered in the realization that they and the findings on which they are based represent not definitive conclusions but beginning points in a necessarily extended search for objectives and effective programs to implement them.

1. Since it is difficult to get agreement among groups when they are faced with a multitude of specific objectives, a better point of departure in the search for objectives may be found in broad educational programs and purposes. At the same time, experience in York Borough

and other school systems indicates that it is difficult if not impossible for groups of people to come together and have meaningful, productive discussions of objectives without having specific proposals and ideas to react to. This observation suggests that a special group or task force, constituted to represent various interests and kinds of expertise, should have the responsibility for developing preliminary definitions of programs and objectives. The aims prepared by such a group should avoid vague generalities but deal with meaningful issues that make their implications for action plain without specifying detailed objectives. Once agreement on the broad configuration of programs and goals is reached, it may then be possible to move to specific objectives with greater ease and success. To begin planning by developing large numbers of specific objectives raises the likelihood of conflict among them and makes it difficult to use them for policy-making and resource management in the school system as a whole. A multiplicity of uncoordinated objectives also complicates the task of evaluation and places burdens upon those who must select the objectives and develop programs to implement them. This burden is likely to fall on principals and teachers already pressed to carry out their existing responsibilities and tasks.

2. Setting objectives for school systems is an unfamiliar and difficult task. It is also a task in which many groups have strong and legitimate interests. For these reasons, no existing structure is likely to be readily available in school systems to support objective setting. In order to meet the challenge of setting objectives, every school system must create a new structure to serve this need. Only general guidelines can be given to define this structure, since the wishes and particular circumstances of the school system should strongly

influence the nature of the structure developed. Whatever its final form, any structure for setting objectives should provide for expression of views from various groups concerned for the conduct of education in the school system and for critical analysis of these views by expert knowledge and opinion.

3. The disagreement among groups found in this survey raises the question of who should decide what in setting school system objectives. The school system which takes its objectives seriously will use them in ways which profoundly influence the conduct of education in that system. Thus the question of who determines objectives is an issue of major importance. Conventional wisdom might hold that questions of this kind come down to differences between trustees as representatives of the public and professionals as knowledgeable experts in the conduct of educational programs. The findings in this study suggest that conventional wisdom is only partly right on this score in that differences of opinion arose as often among professional groups as they did between trustees and professionals. Indeed there are many instances of agreement over all groups. The fact of disagreement on some issues does remain and requires clarification of roles and responsibilities in setting objectives in a school system. Perhaps the soundest suggestion here is to ensure varied contributions from professional and lay opinion to the process of formulating objectives and to ensure that trustees and the public can make informed decisions when they are asked to endorse objectives and programs which arise from that process.

4. Another fundamental issue to be resolved in setting school system objectives concerns the application of objectives within the

school system. Specifically, the issue here is to determine what scope the objectives should have in application. Should objectives be developed to apply across the school system as a whole? Should they be developed by individual schools, or by teachers within schools? Since one of the fundamental notions of educational planning advocates a necessary relationship among objectives, programs, and expenditures to support them, all levels of the school system are inevitably drawn into this relationship. Certainly the policy-making and accountability within a school system implies objectives which apply across the school system. Management of resources too implies management for a purpose and the allocation of resources to programs in support of those purposes. This argument supports the belief that some objectives should apply across the school system as a whole. Without objectives of system-wide scope, it becomes impossible to make strategic decisions about the growth and direction of the system as a whole, even though the system retains heavy responsibility for the character of education within its boundaries and significant powers to enable it to discharge this responsibility. Unless the school system exercises its powers to affect the quality and character of education, it is safe to say that these powers will be assumed partly by senior governments and partly by schools and classrooms.

The suggestion that the school system should set objectives is not an argument that they should set all objectives within the system. System-wide objectives should set a broad framework for the direction and development of educational programs. They should be a stimulant to the development of more detailed objectives within schools and classrooms as teachers and principals create specific programs serving

needs and interests in local communities which they are best placed to detect and respond to. If the Borough of York is to move further with a study of educational objectives, it must look squarely at the question of how objectives at different levels of the organization are to be coordinated. Some might argue that the problem can be solved by leaving objective setting totally to schools and classrooms. Such a decision raises the question of the coordination of objectives among schools and suggests an inevitable role for the system as coordinator and stimulator if not as initiator in the development of objectives.

5. Some efforts towards the planning and management of school systems end with the statement of a set of objectives. After the objectives have been developed in the school system, nothing much happens in terms of changes within the system. Everything goes on largely as before though the school system now has a set of objectives which from time to time it may point to with pride. Perhaps the basic reason for this failure to put objectives into practice stems from the assumption that objectives lead directly to action. In and of themselves objectives have no magic property to bring about change. Translating objectives into programs requires leadership in curriculum development and program building. Implementing objectives depends upon a search for and evaluation of program alternatives followed by extensive in-service activities to support change and development in school programs. Usually such activities are beyond the capacity of individual schools and teachers since they require extensive help and elaborate support from the central offices of the school system.

It is never immediately obvious what programs and resources are best

for achieving objectives. An examination of the objectives endorsed by respondents in this survey reveals a number of difficulties in program building to be overcome in implementing the objectives. These difficulties arise in part because of the particular priorities identified among the objectives, though any clarification and ordering of objectives would create similar problems. Without recognition of these problems by the school system and without its active support for overcoming them, it is unlikely that individuals schools and teachers can cope with them successfully. Before acting on a conviction that program should be built by schools working independently, a school system should assess whether the duplication of effort this strategy involves justifies the resources needed to implement it. The system should also determine the expectations of teachers and principals about such a strategy. If York Borough schools are like many others in the province, teachers and principals are likely to feel that their present tasks are so onerous as to preclude their heavy involvement in innovative curriculum development, however desirable they regard such involvement in its own right. On the other hand, these same teachers and principals will often respond favourably to program change when extensive help in implementation is given from outside the school.

6. Stating objectives is only the beginning point in the effective planning and management of school systems. From this point, the cycle of planning moves through program development and evaluation to return again to objective setting and policy-making. Thus in taking the road towards objectives for policy-making, York Borough must anticipate moving into extensive program development activities, as suggested previously. It must also anticipate making evaluations of the objectives

and programs. All those who have examined the evaluation task in education know its difficulties. The point to be made here is that evaluation will not proceed automatically in a school system unless it is fostered and supported actively even as objective setting and program development must be. Because of the difficulties involved in evaluation, special expertise should be brought to bear upon them. The question of the scope of evaluation must also be faced just as the question of scope of the objectives must be resolved. The notion of system-wide evaluation may be threatening to teachers in particular and may have ill-effects if it is applied without solving basic problems in devising valid and appropriate measures. Nevertheless, the concept of system-wide planning requires some system-wide evaluation if policies are to be shaped to maximize the achievement of objectives and the effective use of resources. Perhaps the essential problem to be overcome here is to develop and use evaluation as a means for professional decision-making rather than as a tool for arbitrary control and punishment. This view argues for evaluation as a joint enterprise involving trustees and other community representatives, teachers, administrators, and evaluation experts.

7. Another consideration of general importance arises from the set of priorities found in the ranking of objectives in this survey. This ranking suggests a greater concern for basic educational goals and less for broader cultural and social needs. While this set of priorities may represent an effective and even necessary deployment of the school's resources, the question still remains as to what other social agencies will perform those functions defined in the

low-rated objectives. The effective operation of school programs may not require that certain of the low-rated objectives be met at all. Other of the objectives may be rated low only because of the view that they are inappropriate functions for the school to perform, though the school assumes that other social agencies will perform them and depends upon these agencies to do so. For example, the objectives set a high priority upon active interests, artistic appreciation, and moral behavior in children but lower values upon other objectives which contribute to development of these capabilities. Depending on experiences the child has out of school, he may or may not have the prerequisite development which will permit the school to meet the objectives on which it sets high priority. An important implication of these findings suggests, therefore, that the school should have close liaison with other socializing and educative forces in the child's life. One way to provide such liaison might be through the community school concept in which various social and educative agencies could coordinate their programs to meet family and community needs.

8. An obvious limitation of this study is that it considered objectives only for elementary schools. While the task of clarifying and agreeing upon objectives for elementary education is difficult enough, that for secondary education will likely prove even more difficult because of the greater diversity of needs and program recognized at the secondary level. This greater difficulty involved in setting objectives for secondary education scarcely permits the task be avoided however onerous it may be. Thus York Borough faces

the need to continue its search for objectives and to extend this search into new areas. Another limitation of this study is that it focused exclusively upon curriculum-oriented objectives. While such objectives are clearly important, they are not the only ones of concern in education. Questions dealing with the equality of educational opportunity, school-community relationships, and the school's role in dealing with problems shared by other social agencies are also important. A search for objectives in such areas would also be appropriate for York Borough and may be a necessary activity for the school system.

APPENDIX A

Identification and Definition of Objectives

EDUCATIONAL OBJECTIVES

Name of Objective	To enable students to
1.1.1 Reasoning:	develop skills in problem solving by perceiving relationships and thinking logically through classification, inference and deduction.
1.1.2 Creativity:	apply creativity, insight and imagination to problem solving.
1.1.3 Memory:	develop memory for information in rote and meaningful forms.
1.2.1 Language Construction:	form and communicate ideas and feelings through effective writing.
1.2.2 Reference Skills:	develop effective reference skills for acquiring and evaluating information clearly and usefully.
1.2.3 Oral-Aural:	acquire and communicate ideas, information, and feelings accurately by listening and speaking.
1.2.4 Word Recognition:	develop reading skills in phonetic and structural analysis of words.
1.2.5 Reading Mechanics:	understand ideas through reading with proficiency and speed.
1.2.6 Reading Interpretation:	read critically by recognizing literary forms, distinguishing fact from opinion and by drawing inferences and generalizations.
1.2.7 Reading Appreciation & Response:	take pleasure in reading as a means of communication and as a means for intellectual and personal growth.
1.3.1 Arithmetic Concepts:	understand the meaning of numbers and their proportions, the decimal system, equations and inequalities, factoring and set notation.
1.3.2 Arithmetic Operations:	perform number operations quickly and accurately with whole numbers, fractions, or decimals.
1.3.3 Mathematical Applications:	use mathematics to solve practical problems.
1.3.4 Geometry:	develop skill in representing space and manipulating spacial relationships.

Name of Objective	To enable students to
1.3.5 Measurement:	understand and apply concepts of measurement, probability and statistics.
2.1.1 Scientific Process:	use scientific processes of experimentation and analysis for understanding the physical phenomena of man's environment.
2.1.2 Scientific Knowledge:	know the basic facts and principles of the biological and physical sciences in relationship to the scientific method.
2.1.3 Scientific Approach:	apply scientific knowledge in solving practical and personal problems.
2.2.1 History & Civics:	know history in terms of significant trends, ideas and social forces, and understand the development of Canadian society within those historical perspectives.
2.2.2 Geography:	understand geographic concepts and the relationships between physical environment and social development.
2.2.3 Sociology:	understand the behavior of persons as members of social groups and use these understandings in solving social problems among persons in families, schools, communities, cultures and races.
2.2.4 Research Skills:	develop skills in collecting, analyzing and presenting information on social and historical issues.
2.2.5 Citizenship:	understand the processes of political decision-making and accept the role of responsible citizenship.
3.1.1 Temperament: Personal:	develop a personal temperament enabling the individual to face reality and use his capacities purposively and creatively without unusual strain or anxiety.
3.1.2 Temperament: Social:	maintain independence within cooperative group action through commitment to norms of social behavior balanced between the extremes of conformity and rebellion.
3.1.3 Attitudes:	develop a sense of accomplishment and attitudes favorable to the attainment of educational goals through school.

Name of Objective	To enable students to
3.1.4 Needs & Interests:	develop individual desires to learn and set appropriate goals in a variety of educational and recreational activities.
3.2.1 Health & Safety:	build attitudes to physical and mental health enabling the individual to cope with problems of disease, drugs, family relationships and sexual expression.
3.2.2 Physical Skills:	build a healthy body able to perform the basic skills in sports and physical activity.
3.2.3 Sportsmanship:	participate in a variety of sports with attitudes of good sportsmanship and team spirit.
3.2.4 Physical Education:	understand the concepts and strategies of sports and know the proper use of equipment.
3.3.1 Educational & Vocational Guidance:	make informed and meaningful decisions in setting educational and vocational goals.
3.3.2 Media & Technology:	learn the technological skills used in contemporary communication, production and business.
3.3.3 Home and Family:	learn the skills of homemaking, consumer buying, and investment for application in daily affairs and adult life.
3.3.4 Leisure Living:	prepare for leisure living through balanced activities in recreation and production, conservation and consumption.
4.1.1 Valuing Arts & Crafts:	appreciate style and creativity in the arts and crafts and find enjoyment in them.
4.1.2 Producing Arts & Crafts:	express self by acquiring and using skills of artistic creation.
4.1.3 Understanding Arts & Crafts:	make aesthetic judgements on objects of fine and practical art through knowledge of art history and principles.
4.2.1 Music Appreciation & Interest:	appreciate artistic expression in music, dance and drama and find self expression through emotional response to them.
4.2.2 Music Performance:	acquire skills for and participate in the performing arts of music dance or drama.

Name of Objectives	To enable students to
4.2.3 Music Understanding:	distinguish style and form in the performing arts and understand their evolution through cultural history.
4.3.1 Second Language Skills I:	understand conversational French or another second language and speak it spontaneously.
4.3.2 Second Language Skills II:	read and write meaningfully in French or another second language.
4.3.3 Foreign Language Assimilation:	appreciate another culture and participate in it through knowledge of a second language.
4.4.1 Knowledge of Moral Standards:	recognize the moral and ethical judgements made in personal and social life by understanding the alternate sets of standards used in making such judgements.
4.4.2 Moral development:	move through the stages of moral development from egocentric and conforming behavior towards the understanding and acceptance of autonomous universalistic standards.
4.4.3 Application of Moral Standards:	use high moral and ethical standards in the conduct of everyday life.
4.5.1 Religious Knowledge:	understand the doctrine and rationale of the world's major religions and develop his own religious beliefs and capacity to define them.
4.5.2 Religious Belief:	apply religious beliefs in daily life, participate in religious activites and use religious belief in facing the dilemmas, mysteries and problems of life.